### **APPENDIX 7**

COST ESTIMATE FOR POST-CLOSURE CARE

POST-CLOSURE PERMIT APPLICATION PIGEON POINT LANDFILL 1101 LAMBSONS LANE NEW CASTLE, DE 19720

#### APPENDIX 7

#### COST ESTIMATE FOR POST CLOSURE CARE

For many years, the Delaware Solid Waste Authority has included a cost estimate for the Post Closure Care of the Pigeon Point Landfill in its Annual Financial Report. This information is part of the total Closure and Post Closure Care Cost Estimate prepared for all DSWA Solid Waste Facilities. Included in this **Appendix 7** are the pages of the most recent Annual Financial Report (FY 2005) estimate pertaining to the Pigeon Point Landfill.

As can be seen, the current Pigeon Point Landfill Post Closure Care Cost Estimate is \$4,725,000 for the 10.5 years remaining (from July 2005) of the thirty (30) year post closure period.

### MEMORANDUM DELAWARE SOLID WASTE AUTHORITY



TO:

Ronald J. Peters, Sr. Chief Financial Officer

FROM:

Richard P. Watson, P.E., DEE

Chief Engineer

RPW

DATE:

August 11, 2005

SUBJECT: FY2005 Closure and Post Closure Care Cost Estimate

Table 1 provides a summary of the FY 2005 Closure and Post Closure Care Cost Estimates for all Delaware Solid Waste Authority Facilities.

Tables 2a, 2b, and 2c present the current landfill capacity and life estimates for the Cherry Island Landfill, Central Solid Waste Management Center, and Southern Solid Waste Management Center respectively. Table 2d provides a summary of Landfill Life Capacity for all DSWA facilities.

Table 3a and 3b identify the actual Post Closure Care Cost for the Pigeon Point Landfill during FY 2005 (July 1, 2004-June 30, 2005).

Table 4 shows the tonnage received at Cherry Island Landfill, Central Solid Waste Management Center, and Southern Solid Waste Management Center during FY 2005. I rounded these tonnage figures to the nearest 100 tons for use in Tables 2a, 2b, and 2c.

Also attached for your information is a letter from Mr. John Blevins, Director of the Division of Air and Waste Management of DNREC dated December 9, 2001 (see attachment 5). It explains that the Pigeon Point Landfill does not require a post closure permit under the current regulations. Therefore, it appears we could change the way we report our expenses associated with maintaining the Pigeon Point Landfill.

Finally, I have attached a letter dated March 27, 2003, from Ms. Jamie Rutherford concerning her request for DSWA to report transfer station costs (see attachment 6).

If you have any questions, please let me know.

#### Attachment

C:

N. C. Vasuki, P.E., DEE
Pasquale S. Canzano, P.E., DEE
Thomas E. Houska II, P.E., DEE
Anne M. Germain, P.E., BCEE
Robin M. Roddy, P.E.
Logan V. Miller, P.E.
Jim Vescovi
Rick Thomas (ELKO Associates)
Trudy A. Davis

ceb/rpw/fy2005closure

BB.5

## TABLE 1 Delaware Solid Waste Authority FY 2005 Closure and Post Closure Care Cost Summary

Number Facility		Closure Cost	30 Year Post Closure Care Cost	Total Cost \$13,031,600	
1 .	1 Cherry Island Landfill		\$8,275,000 for entire 378 acres 2046-2076		
2 .	CSWMC .	\$3,124,600 for final 20 acres in 2056	\$15,577,700 for entire 268 acres 2056-2086	\$18,702,300	
3	SSWMC	\$4,513,400 for final 30 acres in 2029	\$17,153,600 for entire 224 acres 2029-2059	\$21,667,000	
		\$3,195,000 for soil cap if needed on Cell 1&2	\$0 is part of \$17,153,600 shown above	\$3,195,000	
4	DRC Transfer Station	\$20,700	\$0	\$20,700	
5	PTCTS	\$8,450	\$0	\$8,450	
6	Cheswold Collection Station	\$2,325	, \$0	\$2,325	
7	Ellendale Collection Station	\$1,650	\$0	\$1650	
8	Long Neck Collection Station	\$1,650	\$0	\$1,650	
9	Omar Collection Station	\$1,650	\$0	\$1,650	
10	Bridgeville Collection Station	\$1,650	\$0	\$1,650	
11	Pigeon Point Landfill	\$0 closed in 1985	\$4,725,000 for 10.5 years	\$4,725,000	
	TOTAL	\$15,627,675	\$45,731,300	\$61,358,975	

#### Facility #5 - Pine Tree Corners Transfer Station (PTCTS)

The Closure and Post Closure Care estimates were submitted to DNREC on May 7, 2002. A copy of the estimate is enclosed (see attachment 4). I am adjusting this figure for inflation from FY 2002 – FY 2005 by a total of 7.577 percent (i.e. 2% x 2% x 3.4%). The resulting numbers are:

	FY 2002	FY 2005	
Closure Cost	\$7,850	\$8,450	
Post Closure Care Cost	\$0	\$0	

#### Facilities #6 - 10 Collection Stations

The Closure Plans for these facilities has not changed this past year, so their respective costs will be adjusted for inflation by 3.4% as follows:

	FY 2004	FY 2005	
Facility	Closure Cost	Closure Cost	
Cheswold	\$2,250	\$2,325	
Ellendale	\$1,600	\$1,650	
Longneck	\$1,600	\$1,650	
Omar	\$1,600	\$1,650	
Bridgeville	\$1,600	\$1,650	

The Post Closure Care Costs for all these facilities remains \$0 since DSWA would either find another use for the sites or possibly sell the sites.

#### Facility #11 - Pigeon Point Landfill

FY 05 Actual Post Closure Care Cost = \$437,026.53 (see Tables 3a & 3b)

Remaining Post Closure Care Life = 10.5 years (based on post closure period beginning January 1986)

Based upon the actual cost of Post Closure Care during FY05, I will adjust the FY 05 estimate for future year Post Closure Care Annual Cost to \$450,000.

FY05 Post Closure Care Annual Cost Estimate = \$450,000

and

10.5 years x \$450,000 = \$4,725,000 Total Post Closure Care Cost for remaining 10.5 years at Pigeon Point Landfill = \$4,725,000

## DELAWARE SOLID WASTE AUTHORITY PIGEON POINT LANDFILL STATEMENT OF REVENUE AND EXPENSE FOR THE PERIOD ENDING For the Twelve Months Ending June 30, 2005

	Period	YTD C	URRENT YEAR Budget	\$ Variance (Unfavorable)	% Variance (Unfavorable)	PRIOR YEAR YTD
OPERATING REVENUES:						
OPERATING EXPENSES						
EMPLOYMENT COSTS:						
PROFESSIONAL SERVICES Legal Counsel Consulting Eng Serv	17,857.90	\$52.00 105,006.72	\$11,400.00 108,300.00	\$11,348.00 3,293.28	99.54% 3.04%	
Total Professional Services	17,857.90	105,058.72	119,700.00	14,641.28	12.23%	
TRAVEL & BUSINESS MTG EXP						
SUPPLIES AND MATERIALS Maint & Janitorial Supplies Safety Supplies Field & Testing Supplies		359.44	400.00 100.00 1,500.00	400.00 (259.44) 1,500.00	100.00% (259.44%) 100.00%	
Total Supplies & Materials		359.44	2,000.00	1,640.56	82.03%	
UTILITIES Electric Sewage	6,577.45	62,514.24 126,401.03	2,000.00 197,000.00	(60,514.24) 70,598.97	(3,025.71%) 35.84%	
Total Utilities	6,577.45	188,915.27	199,000.00	10,084.73	5.07%	
CONTRACTUAL SERVICES General Maintenance & Repairs Landscaping Topographic Surveying Insurance Expense Methane Gas Recovery Public Notice	1,824.03 9,675.00 1,640.00 10,517.54	18,718.19 16,110.00 738.00 19,678.00 33,122.66 558.45	25,000.00 9,000.00 10,000.00 19,400.00 56,400.00 500.00	6,281.81 (7,110.00) 9,262.00 (278.00) 23,277.34 (58.45)	25.13% (79.00%) 92.62% (1.43%) 41.27% (11.69%) 74.41%	# 1
Permit Expenses Landfill Materials	2,047.18	4,530.00 9,674.96	17,700.00 108,200.00	13,170.00 98,525.04	91.06%	
Site Maintentance & Repairs  Total Contractual Services	1,921.04 27,624.79	6,135.84	81,500.00 327,700.00	75,364.16 218,433.90	92.47% 66.66%	
L/F CLOSURE & POST CLOSU	33,427.00	33,427.00		(33,427.00)		465,786.33
TOTAL OPERATING EXPENSE	85,487.14	437,026.53	648,400.00	211,373.47	32.60%	465,786.33
EXCESS OPERATING REVENU	(85,487.14)	(437,026.53)	(648,400.00)	(211,373.47)	32.60%	(465,786.33
TOTAL OPERATING INCOME	(85,487.14)	(437,026.53)	(648,400.00)	(211,373.47)	32.60%	(465,786.33)

- E .. .



# DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL DIVISION OF AIR & WASTE MANAGEMENT 89 KINGS HIGHWAY DOVER, DELAWARE 19801

TELEPHONE 302 736 . 2 FAN 302 736 . 5

DIRECTOR

December 9, 2001

Mr. Pasquale S. Canzano
Chief Operating Officer
Delaware Solid Waste Authority (DSWA)
1128 S. Bradford Street
P.O. Box 455
Dover, Delaware 19903-0455

Subject:

Post-closure Use of the Closed Pigeon Point Landfill, NSWMC-1.

Reference:

DSWA Phytocap Request (1/22/01) and DSWA Cap Enhancement Request

(9/15/00)

Dear Mr. Canzano:

As a follow-up to our last meeting regarding potential use of the closed Pigeon Point Landfill (PPL), the Department has reexamined its regulatory role in regards to the significant modifications to PPL proposed by DSWA. As you are aware, PPL was closed under the 1974 Delaware Solid Waste Disposal Regulations (DSWDR) not the existing (May 2001) regulation. Delaware Regulations Governing Solid Waste (DRGSW). While it is clear that Section 5.k of the DRGSW would require a post-closure permit for the capping and phyto-remediation activities proposed by DSWA, it is not clear that the 1974 DSWDR authorizes the Department to issue/require a post closure permit for such activities.

Therefore, while the Department believes it is prudent and recommends that DSWA obtain a post closure permit as a cognizant State Agency, the Department has determined that DSWA is not required to obtain a post closure permit for the proposed activities at the PPL. Furthermore, the Department believes that DSWA has the discretion to request a post-closure permit from the Department under DRGSW, and if requested the Department would work with DSWA to issue the permit in a timely fashion.

However, if DSWA determines that they would like to move forward without a postclosure permit, they do not need to have approval from the Department to implement the proposed modifications. It is important to note that while DSWA can proceed with modifications to PPL without formal Department approval under the DRGSW, the Department would like to be informed of activities at the landfill to ensure that if regulatory involvement is necessary, we can inform DSWA in a timely manner. Mr. Pasquale Canzano November 14, 2001 Page 2

Additionally, it is important to recognize that provisions of the Hazardous Substance Cleanup Act (HSCA) could apply to PPL if corrective action is necessary in the future. Insofar as DSWA is statutorily responsible for the maintenance of solid waste disposal facilities, the Department expects DSWA, if they proceed without a post-closure permit, to undertake all of the proposed modifications to the PPL in an environmentally responsible manner. This includes implementing the modification as consistent with the substantive requirements of the May 2001 DRGSW as possible. While I am confident that DSWA is capable of completing the proposed modifications in a manner protective of human health and the environment, my staff remains available to consult with you, if necessary.

Finally, reuse of the landfill will require departmental approval under the 1974 DSWDR, and the conditions/requirements of the phytocap pilot remain valid until the approved expiration date (May 11, 2002). If you have any questions concerning this letter please contact Nancy Marker, of my staff at 739-3689, or me at 739-4764.

Sincerely,

John Blevins

Director

Division of Air and Waste Management

cc: Nancy C. Marker, Environmental Program Manager II, SHWMB
Jamie H. Rutherford, Environmental Program Manager I, SHWMB
Robert Hartman, Environmental Scientist, SHWMB